AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in this application.

1. Cancelled.

2. (Currently Amended) The system of claim ~~1~~ 31, wherein the coverage of the sub spaces ~~areas are~~is contiguous.

3. (Currently Amended) The system of claim ~~2~~ 31, wherein the coverage ~~areas~~ of the sub spaces overlaps.

4. (Currently Amended) The system of claim ~~1~~ 31, wherein each transceiver within a segment is further enabled to maintain continuous communication with a retromodulator unit that moves between ~~coverage areas~~sub spaces.

5. (Currently Amended) The system of claim ~~1~~ 31, further comprising at least one of ~~a~~ he plurality of retromodulator units~~, where the retromodulator unit~~ comprises multiple arrays of lenslets connected to a common modulator and reflector.

6. (Currently Amended) The system of claim ~~1~~ 31, where the retromodulator unit comprises a spherical arrangement of lenslets connected to a common modulator and reflector.

7. (Currently Amended) The system of claim 5 where at least one of the plurality of retromodulator units is provided with an interface for communication with a data processing device.

8. (Currently Amended) The system of claim ~~1~~ 31, ~~further comprising at least one of a plurality of~~

~~retromodulator units,~~ wherein the retromodulator unit comprises ~~two or more~~a plurality of parts, each part comprising a narrow band-pass optical filter and a modulator, and wherein each part is arranged to communicate~~ing~~ with a separate segment of the transceiver unit.

9. (Currently Amended) The system of claim ~~1~~31, wherein the transceiver unit is configured to transmit low level radiation until a detection of a retromodulator unit, whereupon the radiation level is increased in the transceiver covering the predetermined ~~three-dimensional area~~sub space in which the detected retromodulator unit is located,thus achieving reduced power consumption.

10. (Currently Amended) The system of claim 9, wherein detection of the retromodulator unit is triggered by retroflected radiation from the retromodulator unit received by the transceiver unit.

11. (Currently Amended) The system of claim 9, wherein detection of the retromodulator unit is triggered by retromodulated radiation from the retromodulator unit received by the transceiver unit.

12. (Currently Amended) The system of claim ~~1~~31, wherein the radiant energy is transmitted and received via an optical fiber.

13. (Currently Amended) The system of claim ~~1~~31, where the radiant energy is modulated at a high frequency.

14. (Currently Amended) The system of claim ~~1~~31, wherein the retromodulator unit is integrated into a remote control and communicates control data to the transceiver unit, which is integrated into a device controlled by the remote control.

15. (Currently Amended) The system of claim 14, wherein the remote control further comprises at least one ~~or more~~ photovoltaic cells.

16. (Currently Amended) The system of claim 15, wherein the remote control further comprises a battery charger.

17. (Currently Amended) The system of claim ~~1~~ 31, wherein the retromodulator unit is integrated into an electronic remote identification card and the transceiver unit is implemented in an access control point.

18. (Currently Amended) The system of claim 17, further comprising analyzing components for comparing biometric information permanently stored in the card with real-time biometric information obtained from the card owner.

19. (Currently Amended) The system of claim 18, wherein the real-time biometric information obtained from the card owner is sent to the transceiver unit via the retromodulator.

20. (Currently Amended) The system of claim ~~1~~ 31, wherein the retromodulator unit is integrated into a micro aerial vehicle and the transceiver unit is a data collection station.

21. (Currently Amended) The system of claim ~~1~~ 31, wherein the transceiver unit is integrated into a microaerial vehicle and the retromodulator unit is a remote sensor.

22. (Currently Amended) The system of claim 12, wherein the transceiver unit is integrated into a data collection station and the retromodulator unit is a remote sensor.

23. (Currently Amended) The system of claim 22, wherein the remote sensors are installed internally along the length of a pipe.

24. (Currently Amended) The system of claim 12, wherein the transceiver unit is integrated into a

data collection station and the retromodulator unit is a remote sensor that detects intruders.

25. (Currently Amended) The system of claim ~~1~~ 31, wherein the transceiver unit is integrated into a photographic printing service and the retromodulator unit is integrated into a camera.

26. (Currently Amended) The system of claim ~~1~~ 31, wherein the transceiver unit is integrated into a personal computer and the retromodulator unit is integrated into a camera.

27. (Currently Amended) The system of claim 1, wherein the transceiver unit is integrated into a media system and the retromodulator unit is integrated into remote identification tag.

28. (Currently Amended) A method ~~for~~ of retromodulated data communicating~~on~~, the method comprising:

providing a transceiver unit comprising ~~at least one~~a plurality of segments, each segment exhibiting a ~~of a plurality of~~ transceivers~~;~~

transmitting diffused radiant energy through ~~the~~ each transceivers at ~~different~~ a unique spatial angle~~s~~ covering a predetermined ~~three-dimensional area~~space;

setting up communication between ~~a~~ the transceiver unit and a retromodulator unit located within the coverage ~~area~~ space of the~~at~~ transceiver unit;

executing the communication between the transceiver and the retromodulator unit.

29. (Currently Amended) The method of claim 28, wherein setting up communication comprises:

a retromodulator in a transceiver's area of coverage retroflecting the radiant energy; the transceiver responding to the retroflection by increasing the power of the radiant energy; the retromodulator responding to the higher power by initiating data modulation of the radiant energy.

30. (Currently Amended) The method of claim 28, wherein setting up communication comprises:

a retromodulator in a transceiver's area of coverage retromodulating the radiant energy with an initial handshake signal;

the transceiver responding to the retromodulation by increasing the power of the radiant energy;

the retromodulator responding to the higher power by initiating data modulation of the radiant energy.

31. (New) A multi directional optical data communication system comprising:

a transceiver unit; and

a plurality of retromodulator units,

wherein the transceiver unit comprises a plurality of segments, each segment exhibiting a transceiver arranged to transmit a diffused radiant energy beam in a unique spatial angle and receive in turn a retroflected energy beam in said spatial angle;

and wherein the segments are positioned such that each segment is arranged to cover a predefined sub space;

and wherein the plurality of segments exhibit a combined coverage space enabling optical communication between the transceiver unit and each one of retromodulator units in any spatial angle within the combined coverage space;

and wherein each one of the plurality of retromodulator units, responsive to a radiant energy beam in a specific spatial angle from the transceiver unit, is arranged to reflect back in said spatial angle a modulated radiant energy beam, the modulation being in accordance with data originated by a data source operatively associated with the retromodulator unit.